

SOME THINGS INSPECTORS LOOK FOR DURING DUST COMPLIANCE INSPECTIONS

- Implementation of soil surface stabilization measures - dust control measures must be in place at all times, including on weekends to maintain or create a stable or crusted soil surface.
- Permit available on-site - the permit and dust control plan must be available for review on-site at all times; applicable to dust control records if kept on-site.
- Trackout control device at construction exits - all sites larger than two acres must have an effective track-out control device at all construction exit points. This includes haul operations moving >100 cubic yards of material per day.
- Haul trucks tarped - all haul trucks must be effectively covered with a tarp or another suitable enclosure. In addition, when leaving, trucks must be washed out or tarped.
- Immediately clean-up trackout that extends more than 50 feet from the worksite exit(s).
- Fugitive dust from equipment or haul roads - use water to spray the equipment or area to avoid having fugitive dust.
- Project signs - project signs must be posted and display current information for all sites five acres or larger, including a permit number and contact information for permittee.
- Weed abatement activities - apply water before, during, and after weed abatement.
- Water availability and application - water application systems need to be available on-site at all times in order to properly water and maintain a compliant work site.

For more information on Maricopa County's Fugitive Dust Program, please call 602-506-6010 or visit us on the web at www.maricopa.gov/aq/



Maricopa County
Air Quality Department
www.maricopa.gov/aq



TRAINING AVAILABLE

The Dust Compliance Division offers two monthly training sessions to assist in achieving compliance with dust control regulations. The Dust Control Applications course covers the required elements of a complete application. The Dust Control Training course teaches the basic requirements of Rule 310. Each session is designed to last about an hour. For course dates and times or to RSVP for a training session, contact the Maricopa County Air Quality Department at 602-372-1467.

RULE 310

Maricopa County does not meet the Federal Health Standards for ambient air concentrations of particulate matter (which includes dust).

As a result, the Maricopa Association of Governments (MAG) is required to develop and implement a 5% Reduction Plan indicating what measures will be taken to meet the PM-10 Health Standards.

The Maricopa County Air Quality Department Rule 310 contains the requirements that construction projects and others must follow to prevent dust emissions. The explanations, examples, and suggestions contained in this brochure are presented as a guideline and do not cover all aspects of the rule. Please refer to Rules 200 and 310 for the detailed requirements; these may be found at www.maricopa.gov/aq.

DUST CONTROL PERMITS

A dust control permit is required for any dust generating operation disturbing 0.1 acres (4,356 sq. ft.) or more for commercial, industrial, institutional or government purposes. Permits are valid for one year and must be maintained until final stabilization of the disturbed area is achieved. If a permit isn't required, dust control measures must still be met.

The Business Resource Center (BRC) is a program of the Maricopa County Air Quality Department. The primary purpose of the BRC is to assist small businesses that are or will be subject to requirements under the Federal 1990 Clean Air Act Amendment.

Please call 602-506-5102

For more information.

LEGAL REQUIREMENTS

- ✓ Obtain a permit - The property owner, lessee, developer, or general/prime contractor must submit a permit application with a dust control plan and obtain a permit for all dust generating jobs that will disturb at least one-tenth of an acre or 4,356 square feet. Dust control plans must include primary and contingency measures. For more information about obtaining a permit, contact One Stop Shop at 602-372-1071 or visit them at 501 N. 44th Street, Suite 200, Phoenix, AZ 85004.
- ✓ Implement the dust control plan - Before work commences, the responsible party for a site must maintain dust control measures on the site at all times. Each job site must have its own permit and plan.
Be sure you and your subcontractors understand all of the responsibilities in the dust control plan. Have the permit and dust control plan available at the job site. If you are a subcontractor, ask for a copy of the dust control plan and permit before you start work. Enforcement action is taken against the permit holder or subcontractor for violations which occur on the permitted work site.
- ✓ Prevent dust from exceeding visible emission limitations - Rule 310 prohibits visible emissions from exceeding 20% opacity.
- ✓ Implement dust control contingency measures - If the primary dust control measures in the dust control plan prove to be ineffective, the contingency dust control measures must be implemented. One contingency dust control measure is to stop work until primary control measures can re-establish control.
- ✓ Monitoring - Monitor and record the construction activities frequently to assure the dust control plan is being implemented. A sample format for keeping the required daily dust control records can be obtained from the county on the department's website at www.maricopa.gov/aq. Be continuously aware of trackout control device and trackout conditions. Initiate clean up proactively. Keep notes on what activities are occurring at the site.
- ✓ Tarping - Ensure that all haul trucks containing bulk material are tarped when they exit a worksite.

SITE PLANNING

Thinking of dust control prior to project start-up can save time, money and project resources. Phase your project and plan your site layout to minimize disturbance of the soil. Actions to consider include:

- Make sure everyone working on the job knows who is in charge and all the requirements for dust control.
- Limit the amount of area graded at one time. The less acreage of disturbed surface area on-site, the less you have to control and the less water or chemical dust suppressant you need.
- Install wind fences or barriers (<50% porosity). Place barriers around storage piles, parking, and equipment staging areas.
- Develop semi-permanent staging areas to cut down on the amount of disturbed area.
- Restrict access on unpaved areas to vehicles and equipment that are necessary that day. Limit unnecessary travel on unpaved surface areas.
- Re-stabilize disturbed surfaces by paving permanent roads and restoring vegetation as soon as possible.

TRACKOUT CONTROL DEVICE

- ◊ A gravel pad - an aggregate pad at exits designed to remove the mud and dirt from the tires of vehicles leaving a construction site.
- ◊ Paved area on site or off site - paved areas must be restricted to construction traffic only.
- ◊ Grizzly - a device (rails, pipes, grates, etc.) used to dislodge mud, dirt, and/or debris from the tires and undercarriage of motor vehicles and/or haul trucks prior to leaving the work site.
- ◊ Wheel wash - a wheel wash can be used to spray down vehicle tires prior to leaving the work site.

EFFECTIVE WATER USE

Watering is a very effective dust suppressant. When applied regularly, water provides temporary stabilization to disturbed surface areas. Some suggestions:

PRIOR TO ANY ACTIVITY ON SITE -

- ◊ Wet the areas to depth of cuts or equipment penetration.

AFTER CLEARING AN AREA -

- ◊ Apply water with sufficient frequency to prevent visible emissions (at least every two hours).
- ◊ Automatic sprinkler/spray bar systems are optional in these areas.

DURING ACTIVE OPERATIONS -

- ◊ Apply water 15-30 minutes before starting operations.
- ◊ Apply water at the end of the day (e.g. soak overnight the next day's work area).
- ◊ Use a water truck while grading.
- ◊ Use a fine spray or mist when trenching.
- ◊ Mist material after it drops from the screen when screening.
- ◊ Water should be applied in front of equipment.



For Unpaved Haul Roads/Access Roads/Equipment Paths -

- ◊ Apply water in sufficient quantity to maintain a moist surface.
- ◊ Do not over water - muddy conditions increase trackout.
- ◊ Water Penetration - Surfactants added to water increase penetration.
- ◊ Consider dust suppressants/palliatives for long-term haul roads.

MATERIALS HANDLING

Material handling refers to many types of dust generating activities on construction sites, but includes loading and hauling.

LOADING:

- ⇒ Mist material with water while stacking.
- ⇒ Mix excavated material with water prior to loading.
- ⇒ Empty loader slowly and keep bucket close to the truck while dumping.

HAULING:

- ⇒ Tarps or other suitable enclosures are **required** on haul trucks to prevent wind-blown dust.
- ⇒ Do not overload the truck! Keep your load three to six inches below the freeboard to minimize spillage.
- ⇒ Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage.
- ⇒ Sweep off sides and rails to remove spilled material.

TRACK-OUT: (pictured below)

- ⇒ Daily removal of track-out is required when the total amount of track-out does not exceed 50 feet. In those instances where the track-out exceeds 50 feet, it must be cleaned up immediately.
- ⇒ Install a track-out control device at all exit points.
- ⇒ Use grizzlies/gravel pad to remove excess dirt from tires.
- ⇒ Educate all drivers to notify others when track-out exceeds 50 feet.



WIND BARRIERS

Creating a wind barrier could involve installing wind fences, constructing berms, or on-site parking of equipment so that it blocks the wind. Alone, these barriers are not adequate for controlling dust.

Effective wind barriers/fences on the job site are:

- Three to five feet high adjacent to roads and urban areas **AND**
- Made of material with a porosity (open area) of 50% or less.

Effective wind barriers/temporary enclosures for storage piles are:

- A three-sided structure as high as the pile **AND**
- Made of material with a porosity of 50% or less.

CHEMICAL STABILIZERS

Chemical stabilizers are products that are applied to soil surfaces in order to limit dust generation.

BENEFITS:

- Long-term cost savings over regular, frequent watering.
- Conserves water in our desert environment.
- Long-lasting effects: stabilization can last from one to 12 months.
- Significant reduction of fugitive dust emissions.

